



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
---------------	-------------	----------------------	---------------------

08/046, 996 04/13/93 HEALY J 00254/010001

LEE, K EXAMINER

34M2/0616

TIMOTHY A. FRENCH
FISH & RICHARDSON
225 FRANKLIN ST.
BOSTON, MA 02110-2804

ART UNIT PAPER NUMBER

3407 2

DATE MAILED: 06/16/93

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

This application has been examined Responsive to communication filed on _____ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), _____ days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1. Notice of References Cited by Examiner, PTO-892.
2. Notice re Patent Drawing, PTO-948.
3. Notice of Art Cited by Applicant, PTO-1449.
4. Notice of Informal Patent Application, Form PTO-152.
5. Information on How to Effect Drawing Changes, PTO-1474.
6. _____

Part II SUMMARY OF ACTION

1. Claims 1 - 16 are pending in the application.

Of the above, claims _____ are withdrawn from consideration.

2. Claims _____ have been cancelled.

3. Claims _____ are allowed.

4. Claims 1 - 16 are rejected.

5. Claims _____ are objected to.

6. Claims _____ are subject to restriction or election requirement.

7. This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8. Formal drawings are required in response to this Office action.

9. The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are acceptable. not acceptable (see explanation or Notice re Patent Drawing, PTO-948).

10. The proposed additional or substitute sheet(s) of drawings, filed on _____ has (have) been approved by the examiner. disapproved by the examiner (see explanation).

11. The proposed drawing correction, filed on _____, has been approved. disapproved (see explanation).

12. Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has been received not been received been filed in parent application, serial no. _____; filed on _____

13. Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14. Other

EXAMINER'S ACTION

1) The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1-4 and 9-12 are rejected under 35 U.S.C. § 103 as being unpatentable over Podgers. The patent to Podgers is readable on the above claims as comprising a breakaway valve assembly having a first and second valve member (42, 43) disposed in separate housings (34, 13). The housings (34, 13) are retained in the connected position shown in figure 2 by a frangible shear bolt (38). The end of the housing (13) of Podgers, however, has a threaded tube nut (27) which is directly connected to the nozzle (12) instead of a hose terminating in the nozzle. It would have been a matter of expedient design to have the housing end of Podgers connected to a hose terminating in the nozzle to desirably allow the breakaway assembly to be remotely located from the nozzle.

Claims 1, 5, 7, 8, 9, 13, 15, and 16 are rejected under 35 U.S.C. § 103 as being unpatentable over Makishima in view of

Podgers. The patent to Makishima is readable as comprising a valve assembly having separate flow passages (A_1 , A_2) in the socket (1) which are individually valved. Corresponding flow passages (B_1 , B_2) with its individual valves are provided in the plug (2). The connected coupling is illustrated in figure 2 wherein it is shown that the valves (34, 66, 20, 56) are spring-biased engaged to axially move to the open position. It would have been a matter of expedient design to use the flow passage A_1 as a vapor valve and A_2 as a vapor valve. The valve assembly of Makishima, however, is maintained in the coupled position by the ball locking means (14) and not by a frangible shear fitting. The patent to Podgers teaches the use of a frangible shear fitting to couple two coupling members in the open position but upon exceeding a certain pressure, the coupling will separate to the closed position so that the spring biased valve members close. In view of the teaching of Podgers, it would have been obvious to one of ordinary skill in the art to provide the coupling valve assembly of Makishima with a frangible shear fitting to allow the coupling member to be coupled together in the valve open position but will be released upon excessive force applied to the ends of the coupling so that the valves will return to the closed position.

Claims 1, 5-9, and 13-16 are rejected under 35 U.S.C. § 103 as being unpatentable over Smith in view of Podgers. In figure

3, the connected valve coupling assembly is shown to have a first flow passage (23) controlled by the valve members surrounding ports (28, 58). A second flow passage is shown to extend from the ports (70, 71) and is controlled by the valve members (64, 36). Applicant should also see figures 4 and 5 which show the couplings in the uncoupled position. It would have been a expedient design choice to use fuel in the first flow passage and vapor in the second flow passage. The valves are spring-biased and axially moved to the open position. The coupling valve of Smith, however, is maintained in the connected position shown in figure 3 by the locking means (5) and not by a frangible shear fitting. The patent to Podgers teaches the use of a frangible shear fitting to couple two coupling members in the open position but upon exceeding a certain pressure, the coupling will separate to the closed position so that the spring biased valve members close. In view of the teaching of Podgers, it would have been obvious to one of ordinary skill in the art to provide the coupling valve assembly of Smith with a frangible shear fitting to allow the coupling member to be coupled together in the valve open position but will be released upon excessive force applied to the ends of the coupling so that the valves will return to the closed position.

Serial No. 08/046,996

-5-

Art Unit 3407

2) Any inquiry concerning this communication should be directed to Kevin Lee at telephone number (703) 308-1025.

KL
KEVIN LEE
June 09, 1993

Martin P. Schwadron
MARTIN P. SCHWADRON
SUPERVISORY PATENT
EXAMINER
ART UNIT 347